Development of Fabrication Process of Bi-2223 Tubes for FCL Application by Centrifugation

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Bi-2223 tubes for fault current limiter were fabricated via centrifugal casting of Bi-2223 slurries. Bi-2223 slurries were prepared by ball milling, and subsequent dispersion using homo mixer. Large agglomerates in slurry were removed by filtration. The insides of the molds were coated with mold release for separation of tubes from molds. The slurries were centrifuged in rotating tubular molds at 2860 rpm. The molds and tubes were dried to remove the solvent in controlled atmospheres. Cast tubes were released from mold and were sintered. The microstructures and superconducting properties of cast tubes will be reported.

keywords : Bi-2223, Centrifugal Casting, slurry

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